

ATTORNEYS AT LAW

I hereby certify that this paper is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Date: 3/29/04 Signature: [Signature] Attorney

To: Examiner: William Doerrler Telephone Number: 308-0696

Group Art Unit: 3744

Facsimile No.: 703-746-4967

From: Bradley D. Lytle Registration No.: 40,073

Telephone Number: 703-412-6489

Date: March 29, 2004

RE: U.S. Application Serial Number: 09/554,912

RCE

FILED: APRIL 24, 2002

Attorney Docket Number: 9847-0058-6X PCT

TOTAL NUMBER OF PAGES INCLUDING THIS PAGE: 31

### COMMENTS

In accordance with a telephone discussion on Friday, March 26, 2004, Examiner Doerrler requested that the attorney of record file a Declaration indicating that Applicant filed a response to the outstanding Office Action dated April 30, 2003 as indicated by the enclosed copy of the date-stamped filing receipt dated July 30, 2003 with attached copy of the Petition for Subsequent Suspension and a copy of canceled check 296396 for the Petition Fee of \$130.00.

In the event that any fees are due, including any fees required under 37 CFR 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge the required fees to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 CFR 1.136 for the necessary extension of time.

1940 DUKE STREET ■ ALEXANDRIA, VIRGINIA 22314 ■ U.S.A.  
TELEPHONE: 703-413-3000 ■ FACSIMILE: 703-413-2220 ■ WWW.OBLON.COM

BEST AVAILABLE COPY

*Duplicates  
of Paper  
Nos. 22x23*



Docket No.: 9847-0058-6X PCT

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

ATTORNEYS AT LAW

RE: Application Serial No.: 09/554,912  
Applicants: PAR HOLMBERG ET AL  
RCE Filed: APRIL 24, 2002  
For: MAGNETIC ENERGY STORAGE  
Group Art Unit: 3744  
Examiner: W. DOERRLER

SIR:

Attached hereto for filing are the following papers:

**DECLARATION UNDER 37 CFR 1.131**  
**COPY OF DATE-STAMPED FILING RECEIPT DATED JULY 30, 2003**  
**COPY OF CANCELED CHECK 296396 IN THE AMOUNT OF \$130.00**  
**TRANSMITTAL COVER**  
**COPY OF AMENDMENT**  
**COPY OF PETITION FOR SUBSEQUENT SUSPENSION OF ACTION UNDER 37 CFR**  
**1.103(a) PURSUANT TO MPEP §1002.02(c) 9 (with attached copy of previous Petition for**  
**Subsequent Suspension filed on 4-24-02)**

Our check in the amount of \_\_\_\_\_ is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

Customer Number

**22850**(703) 413-3000 (phone)  
(703) 413-2220 (fax)OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
Bradley D. Lytle

Registration No. 40,073

1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314 U.S.A.  
TELEPHONE: 703-413-3000 FACSIMILE: 703-413-2220 WWW.OBLON.COM

DOCKET: 9847-0058-6X PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
PAR HOLMBERG ET AL : EXAMINER: W. DOERRLER  
SERIAL NO: 09/554,912 :  
RCE FILED: APRIL 24, 2002 : GROUP ART UNIT: 3744  
FOR: MAGNETIC ENERGY STORAGE :

**DECLARATION UNDER 37 CFR 1.131**

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

The undersigned, Bradley D. Lytle, herein declares as follows:

1. That I am registered to practice before the U.S. Patent and Trademark Office, my Registration No. being 40,073.
2. That I am an attorney of record in the above referenced patent application.
3. That I filed on July 30, 2003 an Amendment, and a Petition for Subsequent Suspension of Action under 37 CFR 1.103(a) Pursuant to MPEP 1002.02(c)9 (in duplicate) with copy of the original Petition filed April 24, 2002, as evidenced by the attached copy of the date-stamped filing receipt stamped July 30, 2003 from the USPTO Mail Room.
4. That check No. 296396 in the amount of \$130.00 for the Petition Fee has been cashed as evidenced by the enclosed copy of the canceled check 296396.
5. That we have filed a Response to the outstanding Office Action dated April 30, 2003 in a timely manner.

Application Serial No. 09/554,912

The undersigned declares that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

  
\_\_\_\_\_  
Bradley D. Lytle

3/29/04  
\_\_\_\_\_  
Date

Customer Number  
22850

\\ATTY\BDL\8847\88470058-DECLARATION.DOC

OSMM&N File No. 9847-0058-6X PCT

Serial No. 09/554,912

In the matter of the Application of: PAR HOLMBERG ET AL

For: MAGNETIC ENERGY STORAGE

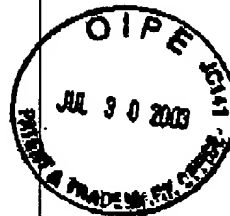
Dept.: E/M

By: BDL/dfd

Due Date: 7-30-03

The following has been received in the U.S. Patent Office on the date stamped hereon:

- ☒ Check for \$130.00
- ☒ Letter/Cover
- ☒ Amendment
- ☒ Dep. Acct. Order Form
- ☒ Petition for Subsequent Suspension of Action Under 37 CFR §1.103(a) Pursuant to MPEP 1002.02(c) 9(in duplicate) (with attached copy of Petition filed 4-24-02)



OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.  
1840 DUKE STREET  
ALEXANDRIA, VA 22314

FIRST UNION NATIONAL BANK  
VIENNA, VA  
68-788/660

296396

296396  
0868

ONE HUNDRED THIRTY AND 00/100 DOLLARS

DATE

AMOUNT ☒

7/30/2003

\$130.00

VOID IF NOT CASHED WITHIN 90 DAYS



AUTHORIZED SIGNATURE

PAY  
TO THE  
ORDER  
OF

COMMISSIONER OF PATENTS &amp; TRADEMARKS

DOCKET 9847-0058-EX PCT petition fee

⑈296396⑈ ⑈056007604⑈2065173481511⑈

⑈0000014000⑈

IN RE APPLICATION OF: Par Holmberg et al  
 SERIAL NO: 09/554,912  
 RCE FILED: April 24, 2002  
 FOR: MAGNETIC ENERGY STORAGE

COMMISSIONER FOR PATENTS  
 ALEXANDRIA, VIRGINIA 22313

SIR:

Transmitted herewith is an amendment in the above-identified application.

- ☐ No additional fee is required
- ☐ Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.
- ☒ Additional documents filed herewith: Petition for Subsequent Suspension of Action under 37 CFR 1.103(a) Pursuant to MPEP 1002.02(c)9 (in duplicate) with copy of Petition filed 4-24-02

The Fee has been calculated as shown below:

CLAIMS	CLAIMS REMAINING		HIGHEST NUMBER PREVIOUSLY PAID	NO. EXTRA CLAIMS	RATE	CALCULATIONS
TOTAL	43	MINUS	43	0	x \$18 =	\$0.00
INDEPENDENT	3	MINUS	3	0	x \$84 =	\$0.00
		<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS			+ \$280 =	\$0.00
		TOTAL OF ABOVE CALCULATIONS				\$0.00
		<input type="checkbox"/> Reduction by 50% for filing by Small Entity				\$0.00
		<input type="checkbox"/> Recordation of Assignment			+ \$40 =	\$0.00
		TOTAL				\$0.00

- ☒ A check in the amount of \$130.00 is attached.
- ☒ Please charge any additional Fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.
- ☒ If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

OBLON, SPIVAK, McCLELLAND,  
 MAIER & NEUSTADT, P.C.

Gregory J. Maier

Registration No. 25,599

Bradley D. Lytle

Registration No. 40,073



22850

Customer Number 22850  
 Tel. (703) 413-3000  
 Fax. (703) 413-2220  
 (OSMNM 05/03)

DOCKET: 9847-0058-6X PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :  
PAR HOLMBERG ET AL : EXAMINER: W. DOERRLER  
SERIAL NO: 09/554,912 :  
RCE FILED: APRIL 24, 2002 : GROUP ART UNIT: 3744  
FOR: MAGNETIC ENERGY STORAGE :

AMENDMENT

ASSISTANT COMMISSIONER OF PATENTS  
WASHINGTON, DC 20231

In response to the Office Action dated April 30, 2003, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 12 of this paper.



Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

**IN THE CLAIMS**

Please amend the claims as follows:

Claims 1-36 (previously cancelled)

37. (currently amended) A superconducting magnetic energy storage, SMES, device comprising:

a switch configured to short circuit a coil; and

said coil configured to be connected in series with a voltage source and wound from a superconducting cable, said coil being configured to operate at voltages above 36kV

including

a superconductor maintained at cryogenic temperatures below a critical temperature during use, and

an electrical insulation configured to surround said superconducting material, wherein said electrical insulation including

an inner layer of semiconducting material electrically connected to said superconductor,

an outer layer of semiconducting material held at a controlled electric potential along a length of said outer layer of semiconducting material, and

an intermediate layer of a solid electrically insulating material positioned between said inner layer of semiconducting material and said outer layer of semiconducting material.

38. (previously presented) The SMES device according to claim 37, further comprising:

a cryostat configured to enclose said coil and said switch.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

39. (previously presented) The SMES device according to claim 37, wherein said superconductor comprises:

a high-temperature superconductor.

40. (previously presented) The SMES device according to claim 39, wherein said high-temperature superconductor comprises:

at least one layer of high-temperature superconducting material;

a cooler configured to cryogenically cool said at least one layer of high-temperature superconducting material below said critical temperature; and

a thermal insulator configured to surround said at least one layer of high-temperature superconducting material and said cooler.

41. (previously presented) The SMES device according to claim 40, wherein said cooler comprises:

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

a support tube through which a cryogenic cooling fluid is passed and about which said at least one layer of high-temperature superconducting material is wound as a tape in a helical layer.

42. (previously presented) The SMES device according to claim 40, wherein said cooler comprises:

a support tube through which a cryogenic cooling fluid is passed and about which said at least one layer of high-temperature superconducting material is wound as a plurality of conductors in a helical layer.

43. (previously presented) The SMES device according to claim 40, wherein said thermal insulator comprises:

an annular space under vacuum containing a thermal insulation.

44. (previously presented) The SMES device according to claim 37, wherein said outer layer of semiconducting material having a resistivity in an inclusive range from 1 through 1000 ohm-cm.

45. (previously presented) The SMES device according to claim 43, wherein said outer layer of semiconducting material having a resistivity in an inclusive range from 10 through 500 ohm-cm.

46. (previously presented) The SMES device according to claim 43, wherein said outer layer of semiconducting material having a resistivity in an inclusive range from 10 through 100 ohm-cm.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

47. (previously presented) The SMES device according to claim 37, wherein said outer layer of semiconducting material having a resistance per axial unit length in an inclusive range from 5 through 50,000 ohm-m<sup>-1</sup>.

~~48. (previously presented) The SMES device according to claim 37, wherein said~~  
outer layer of semiconducting material having a resistance per axial unit length in an inclusive range from 500 through 25,000 ohm-m<sup>-1</sup>.

49. (previously presented) The SMES device according to claim 37, wherein said outer layer of semiconducting material having a resistance per axial unit length in an inclusive range from 2,500 through 5,000 ohm-m<sup>-1</sup>.

50. (previously presented) The SMES device according to claim 37, wherein said outer layer of semiconducting material being contacted by a conductor at said controlled electric potential at a plurality of separated regions along said length of said outer layer of semiconducting material such that adjacent regions of said plurality of separated regions being sufficiently close together that a plurality of mid-point voltages between said adjacent regions being insufficient to cause a corona discharge to occur within said electrical insulator.

51. (previously presented) The SMES device according to claim 37, wherein said controlled electric potential being substantially an earth potential.

52. (previously presented) The SMES device according to claim 37, wherein said intermediate layer being in close mechanical contact with said inner layer of semiconducting material and said outer layer of semiconducting material.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

53. (previously presented) The SMES device according to claim 37, wherein said intermediate layer being joined to said inner layer of semiconducting material and said outer layer of semiconducting material.

54. (previously presented) The SMES device according to claim 37, wherein a strength of adhesion between said intermediate layer and said inner layer of semiconducting material and said outer layer of semiconducting material being greater than one tenth and less than ten times an intrinsic strength of said solid electrically insulating material of said intermediate layer.

55. (previously presented) The SMES device according to claim 53, wherein said intermediate layer, said inner layer of semiconducting material, and said outer layer of semiconducting material being joined together by extrusion.

56. (previously presented) The SMES device according to claim 55, wherein said intermediate layer, said inner layer of semiconducting material, and said outer layer of semiconducting material being applied together over said superconductor via a multi-layer extrusion die.

57. (previously presented) The SMES device according to claim 37, wherein:  
said inner layer of semiconducting material including a first plastic material having a first plurality of electrically conductive particles dispersed therein; and  
said outer layer of semiconducting material including a second plastic material having a second plurality of electrically conductive particles dispersed therein; and

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

said solid electrically insulating material of said intermediate layer including a third plastic material.

58. (previously presented) The SMES device according to claim 57, wherein said first plastic material, said second plastic material, and said third plastic material comprise:

at least one of an ethylene butyl acrylate copolymer rubber, an ethylene-propylene-diene monomer rubber, an ethylene-propylene copolymer rubber, a LDPE, a HDPE, a PP, a PB, a PMB, a XLPE, an EPR, and a silicone rubber.

59. (previously presented) The SMES device according to claim 57, wherein said first plastic material, said second plastic material, and said third plastic material having a substantially identical coefficient of thermal expansion.

60. (previously presented) The SMES device according to claim 57, wherein said first plastic material, said second plastic material, and said third plastic material being a substantially identical material.

61. (previously presented) The SMES device according to claim 37, wherein said SMES device being connected to a high voltage source and forming an electric power transmission system.

62. (Currently Amended) A high voltage system, comprising:  
a superconducting magnetic energy storage, SMES, device having a superconductor insulated against a high voltage of at least 36 kV by an electric insulation system arranged concentrically around said superconductor.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

63. (previously presented) The high voltage system according to claim 62, wherein said high voltage system further comprises:

a high voltage network directly connected to said SMES device without an intermediate transformer.

64. (previously presented) The high voltage system according to claim 63, wherein said high voltage network comprises a high voltage DC network.

65. (previously presented) The high voltage system according to claim 64, wherein said high voltage DC network being configured to operate at a voltage exceeding 10 kV.

66. (previously presented) The high voltage system according to claim 63, further comprising:

a converter configured to couple said SMES device to a high voltage AC network.

67. (previously presented) The high voltage system according to claim 64, further comprising:

a plurality of AC networks connected via said DC network and said SMES device, wherein said DC network being connected to said plurality of AC networks so that said SMES device provides said plurality of AC networks with power.

68. (previously presented) The high voltage system according to claim 62, wherein said SMES device comprises:

a coil.

69. (previously presented) The high voltage system according to claim 62, wherein said SMES device comprises:

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

a cable without turns.

70. (previously presented) The high voltage system according to claim 66, wherein said SMES forming a part of a bipolar DC link.

71. (previously presented) The high voltage system according to claim 62, wherein said insulation system comprises:

a first integral semiconducting part configured to form an inner layer in electric contact with said superconductor;

a second integral semiconducting part configured to form an outer layer around an insulating integral third part; and

said insulating integral third part between said first integral semiconducting part and said second integral semiconducting part;

wherein said insulation system being extruded around said superconductor.

72. (previously presented) The high voltage system according to claim 62, wherein said insulation system comprises:

an all-synthetic semiconducting film wound in an overlapping layer around said superconductor with an inner part of said all-synthetic film in electric contact with said superconductor;

an electrically insulating intermediate part; and

an outer semiconducting part surrounding said electrically insulating intermediate part.

73. (Previously Amended) The high voltage system according to claim 62, wherein said insulation system comprises:



Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

an inner semiconductor part in electric contact with said superconductor including at least one of a cellulose-based, synthetic paper and a non-woven fibre material being overlapped with a synthetic film,

an electrically insulating intermediate part, and

an outer semiconducting part around said electrically insulating intermediate part.

74. (previously amended) The high voltage system according to claim 62, wherein said insulation system comprises:

an inner semiconductor part in electric contact with said superconductor including at least one of a cellulose-based, synthetic paper and a non-woven fibre material being laminated with a synthetic film,

an electrically insulating intermediate part, and

an outer semiconducting part around said electrically insulating intermediate part.

75. (previously presented) The high voltage system according to claim 71, further comprising:

a cooling medium configured to cool said superconductor through flow within said superconductor.

76. (previously presented) The high voltage system according to claim 72, further comprising:

a cooling medium configured to cool said superconductor through flow within said superconductor.

77. (previously presented) The high voltage system according to claim 71, further comprising:

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

a cooling medium configured to cool said superconductor arranged outside of said superconductor.

78. (previously presented) The high voltage system according to claim 72, further comprising:

a cooling medium configured to cool said superconductor arranged outside of said superconductor.

79. (currently amended) A superconducting magnetic energy storage, SMES, device comprising:

a switch configured to short circuit a coil; and

said coil configured to be connected in series with a voltage source and wound from a superconducting cable, said coil being configured to operate above 36kV including

means for superconducting maintained at cryogenic temperatures below a critical temperature during use, and

means for electrically insulating said means for superconducting, including

an inner layer of a semiconducting material electrically connected to said means for superconducting;  
an outer layer for semiconducting material held at a controlled electric potential along a length thereof, and

an intermediate layer of a solid electrical insulation positioned between said inner layer and said outer layer.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

**ARGUMENTS/REMARKS**

Favorable reconsideration of the application in view of the following discussion is respectfully requested.

Claims 37-79 are pending, Claims 37, 62 and 79 having been amended by way of the present amendment.

In the outstanding Office Action, Claims 37-40, 44-57, 59, 61, 62, and 68-74 were rejected under 35 U.S.C. §103(a) as being unpatentable over Prueitt et al. (US Patent No. 5,374,914, hereinafter Prueitt) in view of Elton et al. (US Patent No. 5,036,165, hereinafter Elton); Claims 41-43, 58 and 75-78 were rejected under 35 U.S.C. §103(a) as being unpatentable over Prueitt in view of Elton and further in view of UK Patent 2140195 (hereinafter, GB '195); and Claims 63-67 were rejected under 35 U.S.C. §103(a) as being unpatentable over Prueitt in view of Elton and further in view of Donaldson et al. (US Patent No. 5,339,062, hereinafter Donaldson).

In the outstanding Office Action, all of the pending claims were rejected based upon a combination of Prueitt and Elton, and in some cases, a tertiary reference GB '195 or Donaldson is asserted. Applicants maintain their traversal of the rejection based on the proposed combination of Prueitt and Elton for reasons set forth in the Amendment filed October 9, 2001 and the Request for Reconsideration filed April 24, 2002. All of the arguments supporting Applicants' traversal of the rejections set forth in the Amendment filed October 9, 2001 and the Request for Reconsideration filed April 24, 2002 are incorporated

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

herein by reference.

In the "Response to Arguments" section of the outstanding Office Action, the Examiner rebuts Applicants' argument that the cable described in Elton cannot be formed into coils. The Office Action asserts that this argument "is refuted by the disclosure of Elton et al which states in the abstract and in column 1 line 26 that the conductor may be used in windings in a dynamoelectric machine."<sup>1</sup>

More particularly, the outstanding Office Action relies on the fact that Elton '165 is a divisional application, and therefore is a "patentably distinct" invention from the earlier claimed subject matter in the parent patent, namely Elton '165. The undersigned agrees with this statement. The "invention" of the '165 patent, is described in two claims, namely Claims 1 and 2, which are directed to a "cable" and in no way is descriptive of a winding for use in a machine. Moreover, the '165 patent description of the summary of the invention also makes clear that the embodiment that is the subject of the invention in the '165 is an electrical cable ('165 patent, col. 1, lines 42-50).

The specification of the '165 patent, when properly viewed in context of its parent, namely the '565 patent, describes a cable, as being distinguished from an "insulating conductor" that is used in the winding of a machine. The only thing that the '165 patent makes mention of with regard to a winding in a machine, is the last statement of the abstract. However, as the undersigned attempted to make clear in the past Request for Reconsideration, this abstract is word-for-word the same as the parent, '565 patent, which includes multiple embodiments, some of which are directed to windings in a machine, and

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

another is directed to a cable, which is the subject of the '165 patent. Accordingly, simply because the '165 patent includes the same abstract as its parent, the '565 patent, based on the above discussion of the history of the '165 patent and the fact that the previous Examiner who placed a restriction requirement on the claims in the '165 patent (directed to a cable) and not a winding in a machine, is ample evidence to show that the '165 patent cannot be fairly viewed as teaching the use of the cable structure on the cover figure of the '165 patent as a winding in a machine.

Furthermore, although the outstanding Office Action asserts that Elton's description in the '565 patent, lines 4-5, about the semiconductor layer being "chopped, mixed with resin and molded or blown on any complex shaped substrate" is not evidence of a cable structure like that shown in the cover figure of the '165 patent as being able to be used as a winding in a machine like that of Elton. It is important to note that there are two semi-conducting pyrolyzed glass fiber layers in the cable of Elton '165. The first layer is identified as number 104 and the second is identified as number 110, both of which are separated by an insulation 106. Accordingly, there is no feasible way to form a "winding" for a machine using chopped glass fibers with resin because by first forming the semi-conducting pyrolyzed glass fiber layer, and later forming the outer semi-conducting layer in the same way, the resin would harden and become too stiff when cured to be threaded through the stator slots. Moreover, in order to "thread" a cable like that shown on the cover of the '165 patent through the stator slots of a motor, the cable must be flexible during the threading operation. However, once the resin is cured, it becomes inflexible.

---

<sup>1</sup> See Office Action dated October 24, 2001, at p. 4.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

Suppose if the cable shown on the cover of the '165 patent is only partially formed when inserted in the stator slots. In this case, the inner conductors would be wrapped with a semiconductor pyrolyzed glass fiber, and then threaded through the stator slots, and then cured. It is not then possible to include the insulation and the outer semi-conducting layer while the cable winding resides within the stator slot. On the other hand, if the inner semi-conducting glass fiber layer 104 is cured prior to being placed within the stator slots, it will be stiff and not flexible enough to be threaded through the different stator slots.

Accordingly, Applicants traverse the outstanding Office Action's characterization that even if Elton does teach "chopped, mixed with resin and molded or blown on any complex shaped substrate, this process is insufficient to create a winding structure, that has both an inner and outer layer that must remain flexible when being threaded through the stator slots. Accordingly, it is respectfully submitted that the proposed combination of elements, as asserted in the outstanding Office Action, is not enabled by the description in either the '165 patent or the '565 patent.

The independent claims have been amended to be limited to the voltage range of above 36 kV. This amendment to the claims has been made because in a decision on appeal of a related patent application, namely application Serial No. 08/873,019, that if the claims were limited to voltage over 30 kV, for example, then evidence of commercial success would be of greater probative value in determining the obviousness of the claimed invention. Thus the present claims have been amended to be 36 kV and above. This amendment adds no new matter because the specification indicates that the insulation is able to withstand high voltage.

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

in the range of 1kV and upwards (specification page 4, line 23) and can even operate at 800kV and even above (specification page 5, line 4). See In re Wertheim, 191 USPQ 90, (CCPA 1976) which found that specific suggestions of particular values of 36% and 50%, along with an overall range of 25-60% were sufficient to support a subsequent claim in a range of 35-60% that was not literally set forth in the original specification. In this regard, the Court emphasized that literal support is not required to indicate what the artisan would interpret to be clearly part of the originally described invention. Accordingly, no new matter is added.

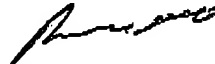
Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 39-79, as amended, is patentably distinguishing over the prior art. The present application is therefore

Application Serial No. 09/554,912  
Amendment to Office Action dated April 30, 2003

believed to be in condition for formal allowance and an early and favorable reconsideration of  
this application is therefore requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Gregory J. Maier  
Registration No. 25,599  
Bradley D. Lytle  
Registration No. 40,073  
Attorneys of Record



**22850**

(703) 413-3000 (Telephone)  
(703) 413-2220 (Facsimile)

\\ATTYBDL\9847\98470058-6\XPCT.AM.7-30-03.DOC



DOCKET: 9847-0058-6X PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :

PAR HOLMBERG ET AL :

EXAMINER: W. DOERRLER

SERIAL NO: 09/554,912 :

RCE FILED: APRIL 24, 2002 :

GROUP ART UNIT: 3744

FOR: MAGNETIC ENERGY STORAGE :

PETITION FOR SUBSEQUENT SUSPENSION OF ACTION UNDER 37 C.F.R. § 1.103(a)  
PURSUANT TO MPEP § 1002.02(c)9

COMMISSIONER OF PATENTS

ALEXANDRIA, VIRGINIA 22313

SIR:

Consistent with 37 C.F.R. § 1.103(a) it is respectfully requested that prosecution in the above-identified patent application be suspended for an additional six months, beyond the 12 months that prosecution has already been suspended. In view of the fact that the Board of Patent Appeals and Interferences has not yet finally decided an appeal with regard to U.S. Patent Application Serial No. 08/973,019, the rationale for granting the present petition is identical to that from the previously filed Petition for Suspension of Action ("original Petition"), which was granted approximately twelve months ago. A copy of the original Petition is attached hereto and the contents thereof are incorporated herein by reference.

At the time of filing the original Petition, it was believed that the decision from the Board of Patent Appeals and Interferences would have been completed within twelve months

Now it appears it may take another few months to finally complete the appeal process. In part this is due to the retirement and replacement of APJ Lall.


Thus, it is respectfully submitted that there are good and sufficient reasons why this subsequent suspension of action is necessary in this case. There are no outstanding Office Actions in the present application at this time because either (1) the application has not yet been examined, or (2) a response to a last Office Action was filed with the original Petition. If a response to the last Office Action has been filed, Petitioner warrants to the USPTO that the response is a complete response that addresses all rejections and objections in the last Office Action and Petitioner has no intention to modify or supplement that response unless required to do so in response to one or more provisions of any Board or Court opinion(s) in appealed case Serial No. 08/973,019.

Consequently, it is respectfully submitted that the present Petition meets the requirements of 37 C.F.R. § 1.103(a). Furthermore, Applicants respectfully request that the Petition to suspend action for an additional six months be granted. The fee as required under §1.17(h) for the present petition of \$130.00 is enclosed.

In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 CFR § 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. § 1.136 for the necessary extension of time. A duplicate of this paper is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

  
Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073



**22850**

(703) 413-3000  
Fax #: (703) 413-2220

COPY

DOCKET: 9847-0058-6X PCT  
ENKEL 8359

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

Pat HOLMBERG, et al.

: EXAMINER: DOERRLER, W.

SERIAL NO: 09/554,912

: RCE FILED: HEREWITH

FILED: AUGUST 18, 2000

: GROUP ART UNIT: 3744

FOR: MAGNETIC ENERGY STORAGE

PETITION FOR SUSPENSION OF ACTION UNDER 37 C.F.R. § 1.103(a) AND  
REQUEST FOR A SECOND SUSPENSION OF ACTION UNDER 37 C.F.R. § 1.103(a).  
PURSUANT TO MPEP § 1002.02(c)9

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

It is respectfully requested that prosecution in the above-identified patent application be suspended for a period of six months under 37 C.F.R. § 1.103(a). Applicants also request a second suspension of time for an additional six months, pursuant to MPEP § 1002.02(c)9, for a total of twelve months, beginning with the filing of the subject Petition.

As explained in MPEP § 709A, a petition for suspension of action under 37 C.F.R. § 1.103(a) must:

- (a) be presented as a separate paper;
- (b) be accompanied by the petition fee set forth in 37 C.F.R. § 1.17(h);
- (c) request a specific and reasonable period of suspension not greater than six months; and
- (d) present good and sufficient reasons why suspension is necessary.

The present Petition complies with the above-identified requirements as it is (a) presented in a separate paper, (b) is accompanied by the petition fee, (c) requests a specific and reasonable period of suspension, initially six months, followed by a concurrent request for a second suspension of action for an additional six months, and (d) presents good and sufficient reasons why this suspension is necessary, as described below.

The subject patent application is one of more than 100 related U.S. patent applications, all of which contain related subject matter. These applications have been handled as a group within TC2800 and have been handled according to special procedures as described in paper No. 11 of U.S. Patent Application 09/147,325, which is the Office of the Deputy Assistant Commissioner for Patent Policy and Projects' "Response to Petition under 37 C.F.R. § 1.82 Seeking Special Treatment Relating to an Electronic Search Tool, and Decision on Petition under 37 C.F.R. § 1.183 Seeking Waiver of Requirements under 37 C.F.R. § 1.98." The basis of the special procedures is that all of the applications contain related subject matter.

During prosecution, a large majority of the applications, including the subject application, have been rejected based on common arguments. Rather than appeal all of the rejected cases to challenge these rejections, Applicants, after consulting with Director of TC2800, Mr. Richard Seidel, and Supervisory Primary Examiner, Elvin Enad, are proceeding to appeal the rejections in at least U.S. Application No. 08/973,019, since the issues being presented on appeal are relevant to the present application. Because it is unlikely that the claims in the present application will be allowed until the issues on appeal are resolved, Applicants respectfully request suspension of action by the Office in the subject application. Since the decision by the Board of Patent Appeals and Interferences will influence so many cases, a speedy decision is expected within the next 12 months. The request for the second suspension is made herewith because it is unlikely that the decision will be made within the

next 6 months. Thus it is respectfully submitted that there are good and sufficient reasons why the suspension of action is necessary in this case.

There are no outstanding Office Actions in the present application at this time because either (1) the application has not yet been examined, or (2) a response to a last Office Action has been filed or is being filed concurrently with this Petition. If a response to the last Office Action has been filed, Petitioner warrants to the USPTO that the response is a complete response that addresses all rejections and objections in the last Office Action and Petitioner has no intention to modify or supplement that response unless required to do so in response to one or more provisions of any Board or Court opinion(s) in appealed case SN 08/973,019.

Consequently, it is respectfully submitted that the present Petition meets the requirements of 37 C.F.R. § 1.103(a). Furthermore, Applicants respectfully request that the Petition to suspend action for six months be granted, and Applicants' Request for a second six month suspension of action also be granted. The fee as required under §1.17(h) for the present petition of \$130.00 is enclosed.

In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 CFR § 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. § 1.136 for the necessary extension of time. A duplicate of this paper is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

**COPY**

Bradley D. Lytle  
Attorney of Record  
Registration No. 40,073  
Thomas J. Fisher  
Registration No. 44,681



22850

Tel. (703) 413-3000

Fax: (703) 413-2220

BDL:TJF:fbl

I:\vtry\mj\9847\0058\98470058.pet.for.suspension.doc

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**